

3.8

Multiplication of Two Mixed Numbers

• Example 1

Multiply.

$$\begin{aligned} 3\frac{2}{3} \times 2\frac{1}{2} &= \frac{11}{3} \times \frac{5}{2} \\ &= \frac{11 \times 5}{3 \times 2} = \frac{55}{6} = 9\frac{1}{6} \end{aligned}$$

Change the mixed numbers to improper fractions.

• • • CHECK YOURSELF 1

Multiply.

$$2\frac{1}{3} \times 3\frac{1}{2}$$

• Example 2

Multiply.

$$\begin{aligned} 5\frac{1}{3} \times 1\frac{1}{4} &= \frac{16}{3} \times \frac{5}{4} \\ &= \frac{16 \times 5}{3 \times 4} = \frac{80}{12} = 6\frac{8}{12} \\ &= 6\frac{2}{3} \end{aligned}$$

• • • CHECK YOURSELF 2

Multiply.

$$3\frac{3}{4} \times 1\frac{1}{5}$$

• • • CHECK YOURSELF ANSWERS

- $8\frac{1}{6}$.
 - Write $3\frac{3}{4}$ as $\frac{15}{4}$ and $1\frac{1}{5}$ as $\frac{6}{5}$. Multiply as before. The product is $4\frac{1}{2}$.
-

3.8 Exercises

Name _____

Section _____

Date _____

A N S W E R S

Multiply. Be sure to simplify each product.

1. $2\frac{1}{3} \times 2\frac{1}{6}$

2. $2\frac{1}{3} \times 2\frac{1}{2}$

3. $1\frac{3}{4} \times 2\frac{3}{5}$

4. $3\frac{2}{3} \times 1\frac{1}{7}$

5. $3\frac{2}{5} \times 1\frac{2}{3}$

6. $3\frac{3}{4} \times 1\frac{1}{5}$

7. $1\frac{2}{5} \times 1\frac{1}{4}$

8. $3\frac{1}{8} \times 5\frac{1}{3}$

9. $3\frac{1}{4} \times 1\frac{1}{3}$

10. $2\frac{3}{5} \times 1\frac{2}{3}$

11. $3\frac{1}{2} \times 4\frac{2}{3}$

12. $4\frac{1}{3} \times 2\frac{1}{4}$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____